

autumn flight of this species in Argentine, observed by Hayward, and one southward in Florida, observed by Johnson. In the light of existing records, however, it is most probable that the butterflies that fly to the north and their offspring all perish, and neither become established in their new home nor return to the south to rejoin the main body of their species.

A New Central American Proctolaboid Genus, *Tela* (Orthoptera, Acrididae, Cyrtacanthacrinae).

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In studying the Orthoptera of Mexico and making comparisons with material from adjacent regions we have discovered that Bruner, in the *Biologia*, has treated several species referable to the present group in a decidedly confusing manner. Material before us enables us to clear up most of this confusion and in so doing it has been found necessary to describe a new genus, one of the species there referable being also new.

***Tela* new genus**

This genus is proposed to include the genotype *chlorosoma* here described, *Anniceris viridulus* Bruner and *Lcioscapheus annulicornis* Bruner. It represents a remarkable combination of the characters found in the allied genera, for the general appearance, contour of vertex and head, proportions of caudal tarsal joints and male supra-anal plate are as in *Ampelophilus* Hebard, the prosternum as in *Dellia* Stal, but the ovipositor valves as in *Lcioscapheus* Bruner.

Size medium, form moderately robust (not as graceful and with shorter limbs than in *Ampelophilus*). Fastigium prominent, narrow, slightly impressed, weakly declivent, with a definite carina at its transverse apex. Frontal costa subsiding at median ocellus, deplanate with a few minute impressed punctulae. Face moderately retreating, impresso-punctate, with carinae very weak but subocular sulcus very decided. Pronotum with cephalic margin slightly produced, with small, faint bi-convexities mesad; weak median carina best indicated cephalad and caudad, transverse sulci very decided; surface impresso-punctate particularly on metazona; caudal margin of disk broadly convex. Tegmina and wings considerably reduced, incapable of flight. Male genitalia of the general type found in *Ampelophilus*. Ovipositor valves represented by slender un-

armed fingers. Prosternum low, conical. Caudal femora with genicular lobes sharply acute-angulate produced in male, broader in female. Caudal tibiae with six (normal, or seven) external spines, lacking an apical spine. Caudal tarsi with joints elongate, second distinctly shorter and third distinctly longer than metatarsus.

Tela chlorosoma new species

1908. *Annicris viridulus* Bruner, in part, Biol. Cent.-Amer., Orth., I, p. 269, pl. III, 17 and 17a. [♀ (not ♂); Teapa, Tabasco, Mexico.]

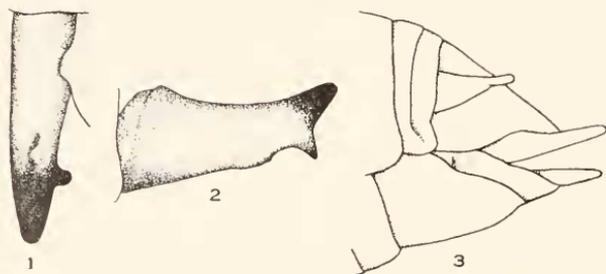


Fig. 1. Dorsal view of male cercus. Type. Lancetilla, Honduras.

Fig. 2. Lateral external view of same.

Fig. 3. Lateral view of apex of female abdomen. Allotype. Lancetilla, Honduras.

This species is readily distinguished from *viridulus* (Bruner) by the annulate antennae, pinkish genicular areas of the caudal femora, shorter tegmina and lack of black marking, the apex of the male abdomen in particular being pale.

Type: ♂; Lancetilla, near Tela, Atlantida, HONDURAS. September 7, 1930. (J. A. G. Rehn; from vine-covered weed tangle in opening in second-growth scrub.) [Acad. Nat. Sci. Phila., Type No. 5511.]

Size medium and form moderately compact for the group. Eyes large and prominent, separated by a very narrow interval. Tegmina slightly longer than combined length of head and pronotum. Supra-anal plate trigono-shield-shaped, a very small rounded projection proximad on each side, surface medio-longitudinally sulcate proximad and with a decided convex carina distad. Cerci curving gradually upward, with a decided sub-apical ventral tooth, the margin before this concave, and a decidedly smaller rounded tooth opposite that mesad on internal surface. Subgenital plate elevated to a sharply rounded apex, with a fine medio-longitudinal carina dorso-distad and the free

dorsal margin carinate. Cephalic coxae unarmed. Caudal femora not elongate (just as in *Ampelophilus*).

Allotype: ♀; same data as type. [Hebard Cln.]

Size decidedly larger, form decidedly more robust. Ovipositor valves unarmed slender fingers, the dorsal very faintly curved dorsad, the ventral straight.

General coloration rich biscay green, meso-caudal portion of occiput and a narrow post-ocular bar very slightly darker (light elm green) continued along the dorsal margins of the pronotal lateral lobes, but very inconspicuous. Abdomen slightly more yellowish; becoming paler distad in male, dull yellow ocher, with apices of cerci black; apex tinged with tawny in female. Fastigium and proximal antennal joints greenish yellow, the antennae thence black with very narrow annuli and apex broadly yellow ocher. Eyes rich hays russet. Tegmina with narrow costal margins hyaline. Wings weakly infuscated. Mouthparts, ventral surface and cephalic and median limbs yellow ocher, the latter strongly tinged with green except proximad. Caudal femora rich biscay green; ventral and internal surfaces, a pre-genicular annulus and genicular lobes dull yellow ocher, the genicular areas tawny (this, except under the microscope, giving a pinkish brown effect. Caudal tibiae briefly dull yellow ocher proximad, then biscay green with dorsal surface distad darkened and in two females there definitely blackish.

Two female paratypes agree closely with the allotype and the measurements of a third smaller paratypic female follow those of the allotype. Length of body ♂ 15, ♀ 21 to 18 (estimated for normal position); length of pronotum ♂ 3.3, ♀ 4.8 to 4.2; total caudal width of pronotum ♂ 2.9, ♀ 4.7 to 4.2; exposed length of tegmen ♂ 5.7, ♀ 7.7 to 6.8; width of tegmen ♂ 2.3, ♀ 3.7 to 3.3; length of caudal femur ♂ 9.2, ♀ 12.1 to 11.2 mm.

Four females and a large immature female were taken in the same kind of environment in which the type was found at Lancetilla from August 24 to September 7.

We believe from examination of the specimens in the British Museum that the female from Teapa, Tabasco, recorded as *Anniceris viridulus* by Bruner, represents this species. The male so described, having been designated as type, must be recognized as *viridulus* and represents a very distinct species, apparently belonging to the present genus. That Institution

also has a male from Guatemala which we believe represents *chlorosoma*.

TELA ANNULICORNIS (Bruner)

1908. *Lcioscapheus annulicornis* Bruner, Biol. Cent. Amer., Orth., I, p. 268. [♀; San Isidro, Guatemala, at 1600 feet.]

The type lacked caudal limbs and Bruner apparently placed the species in *Lcioscapheus* wholly on the degree of development of the organs of flight shown.

Cacao, Trece Aguas, Alta Vera Paz, Guatemala, (Schwarz and Barber), 2 ♀, [U.S.N.M. and Hebard Ctn.]

Though apparently closely related to the preceding, the present insect is more robust, with browns instead of greens the general coloration and dark markings much more definite, eye distinctly shorter, face less strongly impresso-punctuate and caudal margin of pronotum slightly more truncate.

In the best Cacao female (apparently considerably discolored, the other is very badly discolored) the general coloration is reddish brown, the antennae and caudal femora marked exactly as in *chlorosoma*. The wings are very strongly infumate. The caudal tibiae are extensively black dorso-distad. The abdomen has dark lateral margins and a medio-longitudinal line, the subgenital plate black proximad with two bands narrowing but extending to its caudal margin. The postocular lines are very narrow but darker than in *chlorosoma* and continued across the pronotum cause the narrow hyaline costal margin of the tegmina to be also very dark.

Length of body 18.5 (estimated for abdomen in normal position) and 21.7, length of pronotum 3.8 and 4.7, total caudal width of pronotum 3.8 and 4.9, length of tegmen 7.5 and 9.8, width of tegmen 3 and 3.4, length of caudal femur 11.7 and 12.2 mm.

Bruner's female from Purula, Alta Vera Paz, Guatemala, which he recorded as *Anniceris nigrinervis* in 1908, at the British Museum, does not represent that species and may be much nearer to the present genus. It is distinguished by the smooth pronotum, black bordered ovipositor valves, abdomen distad with several black vittae, antennae not annulate, tegmina 8.25 mm. in length and second tarsal joint equal to the first in length. Series from Guatemala are awaited with interest to determine the number of species of *Tela* which there occur.